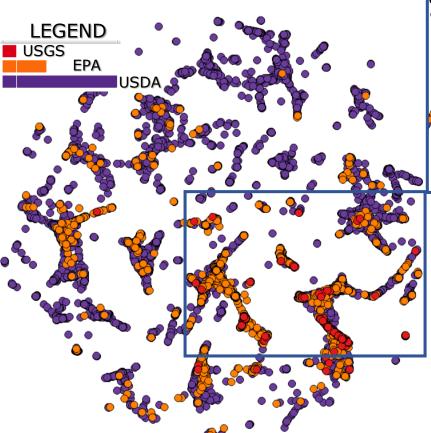
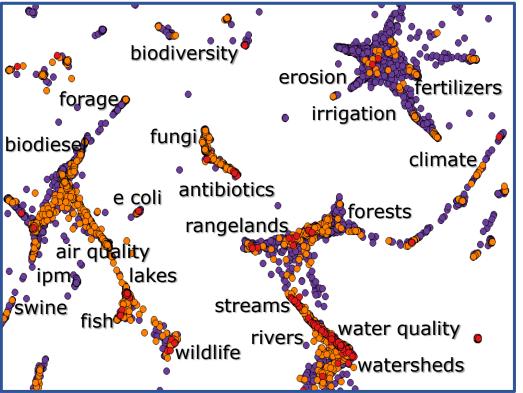


Figure 4. MAPPING NUTRIENT RELATED SCIENCE FUNDED BY USDA, EPA, AND USGS.

Topic modeling was performed on a database of over 20,000 discrete documents related to nutrient science supported by USDA, EPA, and USGS using PushgraphTM. Each document is represented by a colored circle below and is described by topics or the coocurrence of words in the document. A science map of the documents was created by placing documents with similar topics next to each other.





A closer look at the interagency science map above reveals the linkages between science subject matter/topics and the science strengths of each agency. For example, erosion of nutrients is closely associated with fertilizers and irrigation indicating a linkage between those topics. The science in this area is heavily dominated by USDA. USGS investments are largely in water quality aspects of streams, rivers, and watersheds. EPA and USDA have also invested in water quality issues. Visualizing science investments in this way allows identification of interrelationships between the science and the ability to identify potential scientific gaps.